

Appl. No. 10/530,709

Amdt. dated September 11, 2006

Reply to the Office action of June 30, 2006

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application.

## **Listing of Claims:**

Claims 1-12. (Canceled)

13. (Currently amended) A fuel injector (18) for injecting fuel into a combustion chamber of an internal combustion engine, having a pressure booster (3) with a booster piston (4) which separates a working chamber (5) from a differential pressure chamber (6) that can be pressure relieved, the working chamber (5) being continuously acted on with fuel by means of a pressure source (1,2) a servo-valve (22), wherein a pressure change in the differential pressure chamber (6) occurs via actuation of the servo-valve (22), the servo-valve (22) having a control chamber (36) which can be pressure-relieved by means of a valve (32), operation of valve (32) thus opening or closing a hydraulic connection (21, 38) of the differential pressure chamber (6) to a first return (30) on the low-pressure side, the improvement comprising a first sealing seat (24) sealing a return (30) on the low-pressure side off from a high-pressure region of the servo-valve (22) including the control chamber (36), a first hydraulic chamber (37), and a second hydraulic chamber (38), wherein the servo-valve (22) is actuated by means of the valve (32) that connects the control chamber (36) to a second return (31).

14. (Canceled)

15. (Previously presented) The fuel injector according to claim 13, wherein the control

chamber (36) of the servo-valve (22) and the first hydraulic chamber (37) are connected to a

pressure source (1) via the working chamber (5) of the pressure booster (3).

16. (Previously presented) The fuel injector according to claim 13, wherein the second

hydraulic chamber (38) communicates with the differential pressure chamber (6) via a discharge

line (21) that can connect them to a first return (30) on the low-pressure side.

17. (Previously presented) The fuel injector according to claim 16, wherein the servo-valve

(22) includes a piston (23) which includes the first sealing seat (24) that opens or closes the first

return (30) and a second sealing seat (25) that opens or closes the first hydraulic chamber (37).

18. (Previously presented) The fuel injector according to claim 17, wherein the first sealing

seat (24) is embodied in the form of a flat seat or a conical seat (40).

19. (Previously presented) The fuel injector according to claim 17, wherein the first sealing

seat (24) is embodied in the form of a conical seat or slider seal.

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20. (Previously presented) The fuel injector according to claim 17, wherein the second sealing

seat (25) is embodied in the form of a conical seat (29, 33).

21. (Previously presented) The fuel injector according to claim 17, wherein the second sealing

seat (25) is embodied in the form of a slider seal (43, 44, 45).

22. (Previously presented) The fuel injector according to claim 16, wherein the servo-valve

piston (23) comprises a section encompassed by the second hydraulic chamber (38), which

section has an annular surface (34) that is acted on by a residual pressure that moves the servo-

valve piston (23) toward a second sealing seat (25) when the first sealing seat (24) is open.

23. (Previously presented) The fuel injector according to claim 18, wherein the servo-valve

piston (23), along with a first sealing seat (24) embodied with a flat seat design, is accommodated

in a valve body (26; 27, 28) with a two-part design that compensates for an axial offset.

24. (Previously presented) The fuel injector according to claim 17, wherein the servo-valve

piston (23, 46) is embodied in a one-piece form.